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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,978	01/21/2005	Akiko Shinohara	1141/73755	6910
23432 7590 01/30/2007 COOPER & DUNHAM, LLP 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			EXAMINER LARYEA, LAWRENCE N	
			ART UNIT	PAPER NUMBER
			3768	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/521,978

Applicant(s)

SHINOHARA ET AL.

Examiner

Lawrence N. Laryea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 01/21/2005
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- ☐ Notice of Informal Patent Application
- ☐ Other: ____

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities:

At claim 13, line 2 " that " should be deleted.

Appropriate correction is required.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "scanner angle in the imaging conditions is displayed in a parallelepiped configuration formed by tilting parallel at least one of two pairs of side constituting the rectangular frame in the first display device and in the second display device, and is set as the tilt angle of the parallelepiped configuration at least one of the first display device and the second display device" in claim 12, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

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consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 12, it is unclear what Applicant intends to set forth.

5. Claim 10, line 2 recites the limitation "the operating devices."

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2,4-6,8-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by **Nemoto et al (Patent 4642621)**.

8. Re claims 1,2 and 4: **Nemoto et al** teach a medical image diagnosis apparatus which images a subject by forming an image of the whole of a portion of a subject, sets imaging conditions by displaying the imaging conditions on the whole image, and images the subject portion by forming a tomographic image of the subject portion under the imaging conditions (**See Col. 2, line 28-62**) the medical image diagnosis apparatus comprising: a first display device (**See Fig. 7,100**) capable of displaying the whole image and the imaging conditions or variably inputting the imaging conditions by displaying the whole image and the imaging conditions; a second display device (**See Fig. 8(a-b),110**) of extracting some of the imaging conditions and displaying the extracted condition; a display control device (**See Col. 3, line 36-46**) for the first display device and the second display device; and an operating device (**See Col. 6, line 25-34**) of variably inputting the imaging conditions displayed in a display image frame on the second display device.

9. Re claims 5,8 and 9: **Nemoto et al** teach a medical image diagnosis apparatus wherein display devices for the first display device and the second display device are provided separately from each other and at least one of the imaging conditions for imaging varies among the imaging sequences (**See Fig. 7,100 and Fig. 8(a-b),110**)).

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10. Re claims 10,11 and 13:**Nemoto et al** teach a medical image diagnosis apparatus wherein the number of instances of image reconstruction and the image reconstruction positions in the imaging conditions are indicated by lines provided in the rectangular frame and dividing the rectangular frame by extending parallel to sides of the rectangular frame, and are set in at least one of the first display device and the second display device(**Fig. 8(a-b)**).

Further Re claim 13, **Nemoto et al** medical image diagnosis apparatus is capable of , coping the division lines and moving the mark from the first display device to the second display device or between the first display device and the second display device in an identical, similar or analogous form.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nemoto et al** in view of **Iwamoto et al (Patent 6627871)**.

13. Re claim 12: **Nemoto et al** disclose a medical image diagnosis apparatus where plurality screens are used to display an imaging position, imaging area, imaging

reconstruction and a scanner angle but does not expressly disclose the imaging information is display in a parallelepiped configuration.

14. **Iwamoto et al** disclose a displaying apparatus where the information is display in a parallelepiped configuration. (See Col. 4, Line 56-59 and Col. 8, Line 7-15).

It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the imaging displaying apparatus similar to that of **Nemoto et al** to be configured to display information in a parallelepiped manner similar to that of **Iwamoto et al** in order to display images in parallelepiped forms.

15. Applicant has not disclosed that “the scanner angle in the imaging conditions is displayed in a parallelepiped configuration formed by tilting parallel at least one of two pairs of side constituting the rectangular frame in the first display device and in the second display device, and is set as the tilt angle of the parallelepiped configuration at least one of the first display device and the second display device” provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the plurality of displays of **Nemoto et al**, and applicant’s invention, to perform equally well with or without a parallelepiped configuration display, would perform or yield the same function of displaying an image on the screen.

Therefore, it would have been prima facie obvious to modify **Nemoto et al** to obtain the same apparatus as specified in claim 12 because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of **Nemoto et al**.

16. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nemoto et al** in view of **Matsui (Patent 6215479)**.

17. Re claims 14 and 15: **Nemoto et al** disclose a medical image diagnosis apparatus where plurality of screens are used to display a medical imaging information but does not expressly disclose the display apparatus comprises a touch panel and the operating device comprises a pointer.

18. **Matsui** disclose a display apparatus comprises a touch panel and the operating device comprises a pointer. (See Figures 1(a-b), 3, 4(a-b), and 7(a-c) and Col. 19, Line 33-36).

It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the imaging displaying apparatus similar to that of **Nemoto et al** wherein the medical image diagnosis apparatus comprises a touch panel and the operating device comprises a pointer similar to that of **Matsui** in order to display and receive information on the same screen wherein allowing the display to be used as input device. Also, the pointer is used to assist the medical examiner to move any desired location on the screen during examination procedure (See Figures 1(a-b), 3, 4(a-b) and 7(a-c)).

19. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nemoto et al** in view of **Ryals et al (Patent 5803914)**.

20. Re claims 3 and 7: **Nemoto et al** disclose a medical image diagnosis apparatus where plurality of screens are used to display a medical imaging information but does not expressly disclose the medical image diagnosis apparatus information on the screen

includes imaging sequence ordinal numbers for setting the imaging conditions with respect to each of a plurality of imaging sequences and the desired order of execution of the plurality of imaging sequences is designated by inputting numeric values.

21. **Ryals et al** disclose a medical image diagnosis apparatus wherein the information on the screen includes imaging sequence ordinal numbers for setting the imaging conditions with respect to each of a plurality of imaging sequences and the desired order of execution of the plurality of imaging sequences is designated by inputting numeric values. (See Figures 3,6,7,8,10,11,12, 16 and Col. 35, Line 43-65).

22. It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the imaging displaying apparatus similar to that of **Nemoto et al** wherein the information on the screen includes imaging sequence ordinal numbers for setting the imaging conditions with respect to each of a plurality of imaging sequences and the desired order of execution of the plurality of imaging sequences is designated by inputting numeric values similar to that of **Ryals et al** so that sequences of displayed images can be tracked during reconstruction and positioning of acquired images on the display.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Rubbert et al (Patent 6632089) disclose a plurality of displays comprising operative functions which allows the medical examiner to copy, paste, and zoom information on the screens during medical procedure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence N. Laryea whose telephone number is 571-272-9060. The examiner can normally be reached on 9:30 a.m.-5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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